REMARKS

I. Restriction Requirement

A restriction requirement under 35 U.S.C. §§121 and 372 was issued. Specifically, it is alleged that the subject application contains the following inventions or groups of inventions which are independent and patentably distinct from each other:

Group I (claims 1-20), directed to nucleic acid molecules constituting human $GABA_B$ receptor 1 promoters;

Group II (claim 21), directed to a method for assaying $GABA_B$ receptor 1 promoter activity;

Group III (clams 22-27), directed to methods of screening compounds which are modulators of $GABA_B$ receptor 1 transcription,

Group IV (claims 28 and 29), directed to transgenic non-human animals with genomes comprising human $GABA_B$ receptor 1 promoters; and

Group V (claims 30 and 31), directed to methods of screening compounds as modulators of $GABA_B$ receptor 1 activity, which methods use the transgenic animals of claim 28 or 29.

With traverse, Applicants elect the invention of Group III for examination purposes. In view of the preceding comments, the claims of Group III include 22-27, directed to methods of screening compounds for modulation of $GABA_B$ receptor 1 transcription.

II. Traversal of the Restriction Requirement

Applicants respectfully submit that the restriction requirement is improper. The subject application is the national stage application of PCT/SE00/00878. Therefore, as set forth in M.P.E.P. §1850, PCT Rules 13.1 and 13.2 are to be followed when considering unity of invention without regard to the practice in national applications filed under 35 U.S.C. §111.

PCT Rule 13.1 provides that unity of invention exists when a group of inventions are so linked to form a general inventive concept. According to 37 C.F.R. §1.475(a) and PCT Rule 13.2, the criterion regarding unity of invention among a group of inventions is fulfilled by the existence of "a technical relationship among those inventions involving one or more of the same or corresponding special technical features". The expression ***special technical feature*** means those technical features that define a contribution which each of the claimed inventions, considered as a whole, makes over the prior art.

In the subject national stage application, the special technical feature which defines the contribution of each of the claimed inventions over the prior art *is* the $GABA_B$ receptor 1 promoter, P1a or P1b. The $GABA_B$ receptor 1 promoter is a recited feature, either directly or indirectly, of each and every claim in Groups I-V.

With regard to the application of PCT Rule 13.2, the following guidance is provided by M.P.E.P. §1850:

> In applying PCT Rule 13.2 to ... national stage applications under 35 U.S.C. 371, examiners should consider for unity of invention *all the claims* to different categories of invention in the application and permit retention in the same application for searching and/or preliminary

examination, claims to the categories which meet the requirements of PCT Rule 13.2. (Emphasis added.)

Neither Rule 13.2 nor M.P.E.P. §1850 limits unity of invention to only those claims directed to one category, i.e., embodiment or use, of the $GABA_B$ receptor 1 of the invention. Conversely, M.P.E.P. §1850 expressly provides that the retention of ***all the claims*** in the same application should be permitted provided that the requirements of Rule 13.2 are satisfied.

Moreover, Applicants submit that the Examiner has improperly applied a more stringent standard for unity of invention than was applied by the International Authorities in corresponding International Application No. PCT/SE00/00878 since no lack of unity of invention was found for the international application. The Examiner is respectfully directed to "Box II" of the enclosed copy of the cover page of the International Search Report for the corresponding international application.

In view of the above, Applicants submit that the inventions of Groups I-V of the subject application share a special technical feature and arise from a single general inventive concept as required for unity of invention under PCT Rules 13.1 and 13.2. Accordingly, withdrawal of the restriction requirement is requested.

III. Claim amendments

Upon entry of this Preliminary Amendment and Response, claims 1-31 are pending. Provisionally elected claims 22-27 have been amended to bring the claims into conformance with U.S. patent practice and to more clearly and particularly recite what Applicants regard as the

invention. Claim 23 has been revised to eliminate its improper multiple dependency on claims 9-19. Support for the amendment to claim 23 is found in the limitations of original claims 10 and 12. In claim 24, "amphenicol acetyl transferase (CAT)" has been corrected to read "chloramphenicol acetyl transferase (CAT)". The CAT abbreviation for chloramphenicol acetyl transferase is well known in the art and thus support for the amendment is found within originally-filed claim 24 itself.

No new matter has been added by any of the amendments to the claims.

MARKED-UP VERSION SHOWING REVISIONS TO CLAIMS

22. (Amended) A method for screening compounds for modulation [which are modulators] of $GABA_B$ receptor 1 transcription, comprising the steps of:

(a) transfecting a host cell with a suitable expression system comprising a nucleic acid molecule constituting a human $GABA_B$ receptor 1 promoter P1a and/or a human $GABA_B$ receptor 1 promoter P1b, or functionally equivalent modified forms thereof, or active fragments thereof, wherein the promoter or modified form thereof or active fragment thereof is coupled to a reporter gene;

(b) contacting a test compound with the cell; and

(c) determining whether the test compound modulates the level of expression of the reporter gene.

23. (Amended) The [A] method according to claim 22, wherein the [said] nucleic acid molecule of the expression system is selected from the group consisting of:

(a) a nucleic acid molecule comprising SEQ ID No: 1;

(b) a nucleic acid molecule comprising a nucleotide sequence capable of hybridizing, under stringent conditions to a nucleotide sequence complementary to SEQ ID NO: 1;

(c) a nucleic acid molecule comprising SEQ ID No: 2; and

(d) a nucleic acid molecule comprising a nucleotide sequence capable of hybridizing, under stringent conditions to a nucleotide sequence complementary to SEQ ID NO: 2.

[is an expression system according to any one of claims 9 to 19.]

24. (Amended) The [A] method according to claim 22, wherein the [said] reporter gene is selected from the group consisting of:

(a) the firefly luciferase gene; [,]

(b) the bacterial [amphenicol] chloramphenicol acetyl transferase (CAT) gene; [,]

(c) the ß-galactosidase (ß-Gal) gene; [,] and

(d) the green fluorescent protein (GFP) gene.

25. (Amended) The method according to claim 22, wherein the host cell endogenously expresses at least one $GABA_B$ receptor 1.

26. (Amended) The method according to claim 22, wherein the host cell is further transfected with a suitable expression system comprising a nucleic acid molecule encoding at least one transcription factor. [one or more specific transcription factors.]

27. (Amended) The method according to claim 26, wherein [where] the transcription factor is selected from the group consisting of: CREB-1, CREB-2, CREM-1, ATF-1, ATF-2, ATF-3, ATF-4, Sp1, Sp2, Sp3, Sp4, AP-1 and AP-2.

CONCLUSION

It is submitted that Applicants have completely responded to the Office Action. For the foregoing reasons, withdrawal of the restriction requirement is deemed proper and hereby requested. By reason of their direct or indirect recitation of $GABA_B$ receptor 1 promoter the claims are so linked as to form a single general inventive concept. As such, the requirements of 37 C.F.R. §1.475 and PCT Rules 13.1 and 13.2 are satisfied.

Applicants respectfully submit that the claims are in condition for examination and allowance, which action is earnestly solicited. Any fee due in connection with this communication should be charged to Deposit Account No. 23-1703.

Dated: December 28, 2001

Respectfully submitted,

Paul Diamond
Reg. No. 48,532
Agent for Applicant

Customer No. 007470
Agent's Direct Line: (212) 819-8425

Attachment - cover page of International Search Report for PCT/SE/00878

H 2174-1 WO

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference H 2174-1 WO	FOR FURTHER ACTION	see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.
International application No. PCT/SE 00/00878	International filing date (day/month/year) 4 May 2000	(Earliest) Priority Date (day/month/year) 6 May 1999
Applicant AstraZeneca AB et al		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 3 sheets.

[X] It is also accompanied by a copy of each prior art document cited in this report.

1. [ ] Certain claims were found unsearchable (See Box I).

2. [ ] Unity of invention is lacking (See Box II).

3. [ ] The international application contains disclosure of a nucleotide and/or amino acid sequence listing and the international search was carried out on the basis of the sequence listing
   - [ ] filed with the international application.
   - [ ] furnished by the applicant separately from the international application,
     - [ ] but not accompanied by a statement to the effect that it did not include matter going beyond the disclosure in the international application as filed.
   - [ ] transcribed by this Authority.

4. With regard to the title,
   - [ ] the text is approved as submitted by the applicant.
   - [X] the text has been established by this Authority to read as follows:

     Human $GABA_B$ receptor 1 promoters

5. With regard to the abstract,
   - [X] the text is approved as submitted by the applicant.
   - [ ] the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is:

   Figure No. _____
   - [ ] as suggested by the applicant.
   - [ ] because the applicant failed to suggest a figure.
   - [ ] because this figure better characterizes the invention.
   - [X] None of the figures.